

In the past, the disc-shaped items of recorded media have been stored in relatively large and sturdy storage containers in order to protect the items and to house literature that may accompany the disc.

5 The marketplace is now using recorded media on CDs and DVDs to introduce a wide variety of materials to the general public including distributing free music or free software on a disc through the mail in order to advertise a product or service. Previous large storage containers have been too large, heavy, and expensive to use as mailers. The art thus desires a product that can hold and protect a disc while being small enough to mail with a regular envelope
10 or magazine.

Another problem with larger storage containers is that they occupy a large amount of storage space when grouped together in large quantities. Owners of large quantities of discs desire to safely store the discs in a relatively small space. The storage problem is especially problematic when a large number of
15 discs are stored in a vehicle.

The art also desires that the disc be securely held in the storage container so that the disc does not fall out of the container when the container is opened.

BRIEF SUMMARY OF THE INVENTION

In view of the foregoing, an objective of the present invention is to provide a storage container for a disc-shaped item of recorded media.

Another objective of the present invention is to provide a storage container for a disc-shaped item of recorded media that holds the disc-shaped item of recorded media on a retaining hub.

Another objective of the present invention is to provide a storage container for a disc-shaped item of recorded media that is thin so that the container occupies a minimal amount of space.

Another objective of the present invention is to provide a storage container for a disc-shaped item of recorded media that is easy to hold, open, remove, and replace a disc.

Another objective of the present invention is to provide a storage container for a disc-shaped item of recorded media that securely holds the disc on a retaining hub at the center hole of the disc while positioning the entire retaining hub within the storage compartment of the storage container.

Another objective of the present invention is to provide a storage container for a disc-shaped item of recorded media having a latch disposed at the edge of the container that allows the user to securely grasp the storage container while operating the latch.

These and other objectives and advantages of the invention are achieved by a storage container for holding a disc-shaped item of recorded media that

includes a base defining a disc seating area adapted to receive the disc-shaped item of recorded media; a lid hingedly connected to the base between open and closed positions; the lid covering at least a portion of the disc-seating area when the lid is in the closed position; and the base having at least one holding tab that is not covered by the lid when the lid is in the closed position; the holding tab adapted to allow a person to grip the base when opening and closing the lid.

Other objectives and advantages of the invention are achieved by a storage container for holding a disc-shaped item of recorded media; the storage container including a base defining a disc seating area adapted to receive the disc-shaped item of recorded media; a hub connected to the base and disposed in the disc seating area; the hub being adapted to hold the disc-shaped item of recorded media; the hub including a sidewall and a locking finger projecting outwardly from the sidewall; the sidewall having a height and an upper surface; the locking finger having a height substantially less than the height of the sidewall; the sidewall being substantially unmoveable; the locking finger being flexible and adapted to allow a disc-shaped item of recorded media to be forced down over the hub; a lid hingedly connected to the base between open and closed positions; and the lid covering at least a portion of the disc-seating area when the lid is in the closed position.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

Fig. 1 is a perspective view of the storage container with the lid in a closed position;

Fig. 2 is a top plan view of the storage container with the lid in the closed position;

Fig. 3 is a front elevation view;

Fig. 4 is a right side view;

Fig. 5 is a bottom plan view;

Fig. 6 is a rear elevation view;

Fig. 7 is a prospective view of the storage container with the lid in the open position;

Fig. 8 is an enlarged view of the encircled portion of Fig. 7;

Fig. 9 is a view similar to Fig. 7 with a disc-shaped item of recorded media disposed in the storage container;

Fig. 10 is an enlarged view of the encircled portion of Fig. 9;

Fig. 11 is a sectional view taken along line 11-11 of Fig. 9;

Fig. 12 is a view similar to Fig. 11 with the lid in the closed position;

Fig. 13 is an enlarged view of the encircled portion of Fig. 12; and

Fig. 14 is a sectional view taken along line 14-14 of Fig. 2.

DETAILED DESCRIPTION OF THE INVENTION

The storage container of the present invention is indicated generally by the numeral 10 in the accompanying drawings. Storage container 10 generally includes a base 12 and a lid 14 that is movable between open and closed positions. Lid 14 is preferably connected to base 12 by a hinge 16. Hinge 16 is preferably a living hinge that includes first and second hinge portions 18 and 20. Lid 14 is shown in the closed position in Fig. 1 and in open position in Fig. 7. A disc-shaped item of recorded media 22 is held in storage container 10 on a hub 24 that extends up from the middle portion of base 12. Item 22 is entirely enclosed and protected when lid 14 is closed and accessible to the user when lid 14 is open.

Base 12 is substantially square when viewed from a top plan view as shown in Fig. 2 and has rounded corners. Base 12 is sized to receive item 22 with the circumference of item 22 being disposed adjacent the middle portions of the four outer edges of base 12 as shown in Fig. 9. In the preferred embodiment of the present invention, base 12 includes a disc seating area 25 having a diameter slightly greater than the outer diameter of a standard compact disc or DVD (4 and 3/4 inch). Hub 24 extends upwardly from the center of disc seating area 25. Base 12 further includes a pair of fingertip access depressions 26 formed in the corners of base 12 adjacent hinge 16. Fingertip access depressions 26 allow the user to remove item 22 from container 10 when the user desires access to item 22.

Lid 14 has a rear wall adjacent hinge portion 18 and a curved front wall 27 extending between substantially parallel side walls. Curved front wall 27 has a diameter slightly larger than the diameter of a standard CD or DVD (4 and 3/4 inch). In other embodiments, front wall 27 has a diameter that matches (or is slightly larger than) the diameter of the disc being stored in container 10. Lid 14 further includes a rear wall 28 that cooperates with front wall 27 to define the upper portion of the storage compartment of storage container 10. Walls 27 and 28 thus form a continuous wall about lid 14.

In accordance with one of the objectives of the present invention, base 12 includes a pair of holding tabs 30 that extend out away from disc seating area 25. Holding tabs 30 are disposed on the opposite side of base 12 than hinge 16 and allow the user to firmly grasp base 12 while using container 10 without interfering with lid 14. The position of holding tabs 30 allows the user to hold base with one hand while opening lid 14 with the other hand and handling item 22. In addition to the handling feature, holding tabs 30 provide a substantially symmetric shape to container 10. The substantially symmetric shape is a square having rounded corners. The symmetric shape allows container 10 to be easily handled by automated equipment and stored in a variety of configurations within existing storage container holders.

Holding tabs 30 each have a height 32 that defines the thickest portion of container 10. The upper surface 34 of tabs 30 are substantially coplanar with the upper surface of lid 14 when lid 14 is in the closed position.

Holding tabs 30 are spaced apart by a gap 40 along the front wall 42 of container 10. A finger tab 44 extends forwardly from lid 14 and is disposed in gap 40 when lid 14 is in the closed position. In the preferred embodiment of the invention, tab 44 is curved and does not extend out past the boundary formed by the edge of wall 42 as shown in Fig. 2.

Latches 50 extend inwardly from holding tabs 30 on either side of gap 40. Latches 50 engage lid 14 directly or, as in the preferred embodiment, snap fit together with protuberances 52 extending outwardly from lid 14. The positioning and structure of latches 50 and finger tab 44 allow the user to grasp container 10 by one or both of holding tabs 30 and manipulate lid 14 from the closed to the open position with the user's other hand. The user may also grasp container 10 by one of holding tabs 30 and open lid 14 by moving finger tab 44 with the user's thumb.

In accordance with another objective of the present invention, item 22 is securely held in storage container 10 by hub 24. Hub 24 has a substantially circular outer circumference that fits within the standard center hole of a CD or DVD. Hub 24 has a height that causes the top wall of the hub to engage the inner surface of lid 14 when lid 14 is in the closed position as depicted in Figs. 12 and 13. The small height of hub 24 allows storage container 10 to be relatively thin compared to other storage containers known in the art. The overall height of storage container 10 merely includes the thickness of base 12, the height of hub 24, and the thickness of lid 14.

In accordance with another objective of the present invention, hub 24 includes at least one, but preferably a plurality of locking fingers 60 that project radially outwardly from the top of hub 24. The top of each locking finger 60 is preferably coplanar with the top surface of hub 24. Each locking finger 60 is relatively small compared to the circumference and height of hub 24. In the preferred embodiment of the invention, the height of hub 24 is only slightly taller than the height of a standard CD or DVD and may have a height of 1/16 of an inch while each locking finger 60 has a height (or thickness) of 1/4 to 1/12 of the hub 24 thickness. Each locking finger may have a height of only 0.01 inches in the preferred embodiment of the invention.

In one embodiment of the invention, each locking finger 60 extends radially outwardly over the upper edge of item 22 so that fingers 60 securely hold item 22 in storage container on hub 24 when item 22 is pushed down over hub 24. Locking fingers 60 are sufficiently flexible to be forced inwardly through the center opening of item 22 when item 22 is pushed over hub 24. In some situations, locking fingers 60 will become trapped between the other circumferential edge of hub 24 and the inner edge of item 22 creating a frictional fit between item 22 and hub 24. In other embodiments of the invention, locking fingers 60 are configured to be wedged between the inner edge of the disc and the outer edge of hub 24 to frictionally hold the disc on hub 24.

In another embodiment of the invention, hub 24 has a larger diameter at its upper surface than at its lower surface. The larger upper diameter is

configured to force the disc to be snap fitted over hub 24. The smaller base diameter allows the disc to slightly move while held on hub 24. The larger upper diameter of hub 24 may be achieved by angling the wall of hub 24 or by curving the wall outwardly toward the top of hub 24. The disc preferably rotates on hub 24 in this embodiment and in the embodiments described above. The rotation of the disc prevents hub 24 or container 10 from unnecessarily stressing the disc when the disc is stored in container 10.

In the foregoing description, certain terms have been used for brevity, clearness, and understanding. No unnecessary limitations are to be implied therefrom beyond the requirement of the prior art because such terms are used for descriptive purposes and are intended to be broadly construed.

Moreover, the description and illustration of the invention is an example and the invention is not limited to the exact details shown or described.